

In the Specification:

On page 11, carrying over to page 12, please replace the paragraph beginning with "Figure 4 is a block diagram . . ." with the following:

B1 ✓
Figure 4 is a block diagram of the present invention. Figure 4 shows how the test chamber assembly 14 is used with the present invention. A monochromator 32, located in or near the cab of the combine 10, is connected to a fiber optic cable 34. The other end of the fiber optic cable 34 is connected to a sensor head 36. The sensor head 36 can be located in a number of locations relative to the test chamber assembly 14. Figures 2 and 3 show two possible locations for the sensor head 36. In a first location, a sensor head 36A is located below the elevator 12 and senses the grain as it falls into chute 16. In a second location, a sensor head 36B can be accurately controlled by controlling the amount the door 18 is opened. Preferably, the area around the sensor head 36 is enclosed to limit the amount of stray light, which affects the performance of the sensor head 36.

In the Claims:

Please cancel Claims 2-20, 22-28, and 35-38 without prejudice to the underlying subject matter.

Please amend Claims 1, 21, 33, and 39 as follows:

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B2
1. (Twice Amended) An apparatus for measuring the constituents of a substance, said apparatus comprising:
a light source capable of producing near infrared radiation in a controllable direction to a substance location;
a sensor oriented towards the substance location, said sensor being capable of sensing near infrared radiation reflected from or passing through the substance location;
a housing including a monochromator having no moving optical components, said monochromator being capable of isolating narrow portions of the near infrared spectrum, said monochromator being selected from the group consisting of a stationary interferometer, a stationary Hadamard mask, an acoustic-optic tunable filter (AOTF), and an electro-optic modulator, said housing further including a detector positioned to detect and quantify one or more isolated narrow portions of the near infrared spectrum created by the monochromator;